

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
16 June 2005 (16.06.2005)

PCT

(10) International Publication Number
WO 2005/053745 A1

(51) International Patent Classification⁷: **A61K 47/00**

(21) International Application Number:
PCT/EP2004/013619

(22) International Filing Date: 1 December 2004 (01.12.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
03027460.9 1 December 2003 (01.12.2003) EP

(71) Applicant (for all designated States except US): **BIO-
GENERIX AG** [DE/DE]; Janderstrasse 3, 68199
Mannheim (DE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **ARNOLD, Stefan**
[DE/DE]; Marstallstrasse 49A, 68723 Schwetzingen (DE).
FRANSSEN, Okke [NL/NL]; Hooft Graaflandstraat
21, NL-3525 VM Utrecht (NL). **MEKKING, Albert**
[NL/NL]; De Berkel 1, NL-3448 CR Woerden (NL).

(74) Agents: **DR. KELLER, Günter** et al.; **LEDERER &
KELLER**, Prinzregentenstrasse 16, 80538 München (DE).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MY, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SI, SZ, TZ, UG, ZM,
ZW). Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM).
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,
SE, SI, SK, TR). OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: **ERYTHROPOIETIN SOLUTION FORMULATION**

(57) Abstract: A stable pharmaceutical formulation of erythropoietin is disclosed which contains tris-(hydrox-
ymethyl)-aminomethane as stabilizer, whereby the formulation does not contain amino acids or human serumalbumin.

WO 2005/053745 A1

BEST AVAILABLE COPY